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Aerospace Medicine

OCCUPATIONAL HEALTH PROGRAM

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This Air Force instruction (AFI) implements Air Force policy directive (AFPD) 48-1, *Aerospace Medical Programs* and AFPD 90-8, *Environment, Safety, and Occupational Health*. It establishes procedures that govern management of medical support of installation level occupational health programs throughout the Air Force. It applies to all Air Force personnel (at classified and unclassified operations). Additionally, this AFI applies to the Air Force Reserves, the Air National Guard, and direct reporting units (DRU) and field operating agencies (FOA) not located on Air Force installations. This AFI does not apply to contractors unless specifically specified in the contract. Send comments and suggested improvements on AF Form 847, **Recommendation for Change of Publication**, through channels, to AFMOA/SGOE, 110 Luke Ave, Suite 400, Bolling AFB DC 20332. Any organization may supplement this instruction. Major commands (MAJCOM), field operating agencies (FOA), and direct reporting units (DRU) send one copy of each supplement to AFMOA/SGOE; other commands send one copy of each supplement to the next higher headquarters. This instruction is consistent with Air Force Occupational Safety and Health (AFOSH) standards.

Chapter 1

PURPOSE AND RESPONSIBILITIES

Section 1A—Program Purpose

1.1. Purpose. The purpose of the AF Occupational Health Program is to enhance overall mission effectiveness by protecting human resources in the workplace, reducing costs, and improving performance.

1.1.1. This program is a key component of the USAF Preventive Medicine Program and is unique as it applies to both Federal civilian and military personnel.

1.1.2. This program is a key component of Air Force Environment, Safety, and Occupational Health (ESOH) program.

1.1.3. Secondary to increasing mission effectiveness is compliance with applicable laws and regulations.

1.1.4. This program provides guidance to operate an occupational health program in peacetime and should be used as a basic framework for contingency operations.

1.1.4.1. Occupationally related exposures to hazardous materials and physical agents during contingency operations can contribute to the incidence of disease and nonbattle injury (DNBI) and adversely affect mission accomplishment.

1.1.4.2. Efforts should be made, dependent upon the nature of the deployment (i.e., peacekeeping, humanitarian, war) to ensure that occupational exposure to hazardous agents neither adversely affect the health and safety of our personnel, their families, nor the mission.

1.1.4.3. Measures should be taken to ensure appropriate personal protective equipment (PPE) is available and utilized. Other feasible controls appropriate for the contingency should be implemented whenever possible. Likewise, exposure surveillance should be accomplished and documented in order to help ensure the completeness of each individual member's career exposure record.

1.2. Strategy. The basic strategy of the AF occupational health program is to provide the medical component required to build a better Air Force. This is accomplished through collaboration and integration (internal and external to "Team Aerospace") working toward the following:

1.2.1. Structure ESOH support to minimize interference with and maximize support of operations.

1.2.2. Prioritize work based on risk, the opportunity to improve performance and/or reduce costs, and legal requirements.

1.2.3. Provide ESOH technical expertise to workplace supervisors to support risk management and improvements in productivity. Provide input to commanders and supervisors on the priority of hazard management based on the level of risk.

1.2.4. Coordinate and work with other installation ESOH professionals to achieve the most effective operations for the AF.

*Section 1B—Responsibilities***1.3. Deputy Assistant Secretary of the Air Force for Environment, Safety, and Occupational Health (SAF/MIQ).**

- 1.3.1. Provide guidance, direction, and oversight of all occupational health matters pertaining to the formulation, review, and execution of plans, programs, and budgets.
- 1.3.2. Review the progress of the occupational health program at least annually.

1.4. Commander, Air Force Medical Operations Agency (AFMOA).

- 1.4.1. Provide strategic direction and advocacy for occupational health program development and execution.
- 1.4.2. Facilitate development of policy to support and enhance the occupational health program.
- 1.4.3. Use the Mission Support Plan (MSP) to provide strategic direction and advocacy for development and execution of the occupational health program.
- 1.4.4. Provide data management support through the occupational health corporate information management (CIM) systems and develop methods and programs to provide information on compensation costs.

1.5. Major Command Surgeons.

- 1.5.1. Support occupational health initiatives by validating requirements and technical needs.
- 1.5.2. Set MAJCOM priorities for occupational health.
- 1.5.3. Use the operational task 4 (OT4) Investment Strategy, Mission Support Plan (MSP), and Planning, Programming and Budgeting System (PPBS) to acquire resources and execute occupational health programs.

1.6. Institute for Environment, Safety, and Occupational Health Risk Analysis (IERA).

- 1.6.1. Provide specialized, technical consultation to installation occupational health programs for the risk assessment and risk management of physical, chemical, radiological, and biological hazards.
- 1.6.2. Provide specific consultation to installation occupational health programs in the following areas: air quality, water quality, industrial hygiene, ionizing and non-ionizing radiation, occupational medicine, clinical examinations, noise, hearing conservation, toxicology, ergonomics, epidemiology, chemical analysis, respiratory protection, personal protective equipment, engineering controls, and other related ESOH areas.
- 1.6.3. Perform on site evaluations, sampling, analysis and mitigation as requested by installation occupational health programs through MAJCOMs and CINCs.

1.7. Installation Commanders.

- 1.7.1. Provide a safe and healthful workplace for all Air Force workers, civilian and military.
- 1.7.2. Monitor execution and cost of Installation Occupational Health Program through local Air Force Occupational Safety and Health Council (or equivalent).

1.8. Medical Group Commander (or local equivalent).

- 1.8.1. Provide occupational health support to the Wing (or local equivalent) and supported units through the Aerospace Medicine Squadron (or local equivalent).
- 1.8.2. Support the occupational health program through equitable resourcing and staffing.

1.9. Commander, Aerospace Medicine Squadron (AMDS) or local equivalent.

- 1.9.1. Execute the occupational health program.
- 1.9.2. Develop and implement methods (support agreements, contracts, etc) to augment the occupational health program where required or necessary personnel are not assigned.
- 1.9.3. Assign a physician to serve as the installation occupational medicine consultant. An occupational medicine physician (48EX) or an aerospace medicine specialist (48AX) is most appropriate but an experienced flight surgeon or occupationally-oriented family physician may substitute in the absence of a specialist. (NOTE: Work with MAJCOM to arrange proper level of training and oversight based on local needs).
- 1.9.4. Establish an Occupational Health Working Group (OHWG).
 - 1.9.4.1. Appoint members to the OHWG to include representatives from Bioenvironmental Engineering, Flight Medicine, Physical Exams, and Public Health. Appoint representatives from Health Promotion, Aerospace Physiology and other specialists as consulting members as required to meet local needs and business practices.
 - 1.9.4.2. Integrate efforts with other installation ESOH professionals such as Safety, Environmental, and Fire Prevention.
 - 1.9.4.3. Encourage participation in the OHWG from other base agencies such as civilian personnel compensation office, supervisors, and union representatives.
 - 1.9.4.4. Chair or appoint a chairperson for the OHWG based on rank and experience.
 - 1.9.4.5. Represent the OHWG to the Executive Committee.

1.10. Commander, Bioenvironmental Engineering (BE) Flight (or local equivalent).

- 1.10.1. Execute the Bioenvironmental Engineering Activity Surveillance Process according to Chapter 2.
- 1.10.2. Ensure BE participation in the OHWG.
- 1.10.3. Provide consultation on occupational health hazard risk assessment and risk management (recognition, evaluation, and control).
- 1.10.4. Notify Air Force workers (civilian and military) potentially exposed to occupational hazards of their risks and the methods to effectively eliminate or minimize exposures.
- 1.10.5. Assist workplace supervisors with information on regulatory compliance requirements associated with the occupational health program.
- 1.10.6. Review plans, programs, and designs from weapon system planners, maintainers and installation support organizations to anticipate and prevent occupational hazards and to highlight occupational health requirements.

- 1.10.7. Assist with design and acceptance testing of engineering control measures.
- 1.10.8. Assist commanders and supervisors in development of risk management measures in order to facilitate their incorporation of Operational Risk Management into their operations.
- 1.10.9. Manage occupational health information according to AFMAN 48-146, *Occupational Health Information Management*.
- 1.10.10. Use the Institute for Environment, Safety and Occupational Health Risk Analysis (IERA) for technical consultation as necessary.
- 1.10.11. Facilitate cross functional "teaming" to identify opportunities for process improvement to protect workers, drive down costs, and improve performance.
- 1.10.12. Provide occupational health related training, such as respiratory protection.
- 1.10.13. Investigate occupational illnesses.

1.11. Commander, Flight Medicine Flight (or local equivalent).

- 1.11.1. Ensure Flight Medicine participation in the OHWG. (Note: The cockpit is a workplace).
- 1.11.2. Manage occupational health information according to AFMAN 48-146, *Occupational Health Information Management*.

1.12. Chief, Physical Exams and Standards Element Or Occupational Medicine Section.

- 1.12.1. Ensure section participates in OHWG.
- 1.12.2. Perform Occupational Health Examination (OHE) scheduling, reporting, and follow up according to paragraph 3.4.
- 1.12.3. Manage occupational health information according to AFMAN 48-146, *Occupational Health Information Management*.

1.13. Commander, Public Health Flight (or local equivalent).

- 1.13.1. Ensure Public Health (PH) participation in the OHWG.
- 1.13.2. Provide epidemiology services to the OHWG.
- 1.13.3. Monitor and provide feedback to the OHWG on the reporting and investigation of suspected occupational illnesses or incidents.
- 1.13.4. Provide consultation on risk communication to the OHWG.
- 1.13.5. Perform trending of occupational illness outcomes.
- 1.13.6. Work with Bioenvironmental Engineering to prepare and provide information that addresses recognition, prevention and health effects of occupational exposures and meets regulatory requirements.
- 1.13.7. Use the Institute for Environment, Safety and Occupational Health Risk Analysis (IERA) for technical consultation as necessary.
- 1.13.8. Manage occupational health information according to AFMAN 48-146, *Occupational Health Information Management*.

1.14. Installation Occupational Health Consultant.

- 1.14.1. Participate in the OHWG.
- 1.14.2. Serve as approval authority for OHWG recommended clinical occupational health examination requirements.
- 1.14.3. Consult with obstetrical providers (including local civilian referral sources) to assist in formulation of duty restrictions for pregnant workers with input from PH, BE, and other appropriate sections according to AFI 44-102, *Community Health Management*.
- 1.14.4. Establish and monitor local standards of care for reporting and investigating occupational health occurrences.
- 1.14.5. Determine work relatedness of suspected occupational illnesses by consultation with worker, supervisor, BE, PH, and other appropriate agencies using guidelines in NIOSH publication 79-116, *A Guide to the Work-Relatedness of Disease*.
- 1.14.6. Use the Institute for Environment, Safety and Occupational Health Risk Analysis (IERA) for technical consultation as necessary.

1.15. Commander, Health Promotion Flight (or local equivalent).

- 1.15.1. Provides Health Promotion (HP) consultation, as directed by AMDS/CC, to the OHWG.
- 1.15.2. Provides HP programs in the work centers, when required, after review of epidemiologic trends and other indicators note adverse outcomes (or their potential) in the occupational health program.
- 1.15.3. Consults with members of the OHWG to address population based prevention of occupational injury and illness as an adjunct to occupational health efforts, particularly in exercise, tobacco cessation, alcohol abuse prevention and other wellness programs to prevent disease and injury.

1.16. Installation Occupational Health Working Group.

- 1.16.1. Implement and execute the local occupational health program under the direction of the AMDS/CC (or local equivalent).
- 1.16.2. Determine and recommend occupational health examination requirements using authoritative references such as OSHA and DOD 6055.5-M, *Occupational Medical Surveillance Manual*. Implement procedures to update requirements when changes occur.
- 1.16.3. Implement appropriate procedures for reporting and investigation of suspected OHO's (Ref: AFI 48-105, Surveillance, Prevention, and Control of Diseases and Conditions of Public Health or Military Significance, Appendix E).
- 1.16.4. Design, implement and assess measures to improve the local occupational health program. Improvement areas include, but are not limited to: measures to complete occupational examinations and decrease occupational injury and illness rates, measures to improve overall program efficiency, measures to integrate occupational health requirements with existing programs (e.g. PHA), methods to decrease compensation costs, and methods to improve cost and performance.
- 1.16.5. Brief program effectiveness to the AFOSH Council at least annually.

- 1.16.6. Provide program briefings to the Federal Employee Compensation Act (FECA) working group and other appropriate forums as necessary. These briefings should be designed to raise awareness, provide recommended solutions to problems, and enlist support for program improvement.
- 1.16.7. Define responsibilities of specific working group members to provide program assessment information such as no show and exam completion rates. NOTE: Privacy Act information may not be given to the supervisor or any other unauthorized individual or organization.
- 1.16.8. In a timely manner, notify supervisors and commanders, as appropriate, of adverse trends, including occupational health occurrence (OHO) (i.e., illness rates; adverse reproductive outcomes, etc.) incidence, no show, exam completion rates, compliance trends and compensation claims and awards.
- 1.16.9. Discuss identified training shortfalls, including adverse occurrences that may represent training deficiencies and develop effective strategies to address them.
- 1.16.10. Determine training, documentation and notification requirements for reproductive hazards.
- 1.16.11. Identify and implement opportunities to improve worker health, enhance mission effectiveness including decreased costs and increased performance, and otherwise meet customer needs.
- 1.16.12. Develop local measures of program effectiveness tailored to the needs of each program.
- 1.16.13. Establish, document and communicate education requirements to supervisors. Communicate new education requirements within 30 days of identification.
- 1.16.14. Ensure involvement in the FECA working Group.
- 1.16.15. Consult with IERA, as necessary, to support installation risk analysis and cost/performance requirements.
- 1.16.16. Establish local procedures to notify individuals and supervisors of occupational health exam/fit-testing results according to AFOSH and OSHA requirements.

Chapter 2

ACTIVITY SURVEILLANCE PROCESS

Section 2A—Activity Surveillance Process Purpose and Description

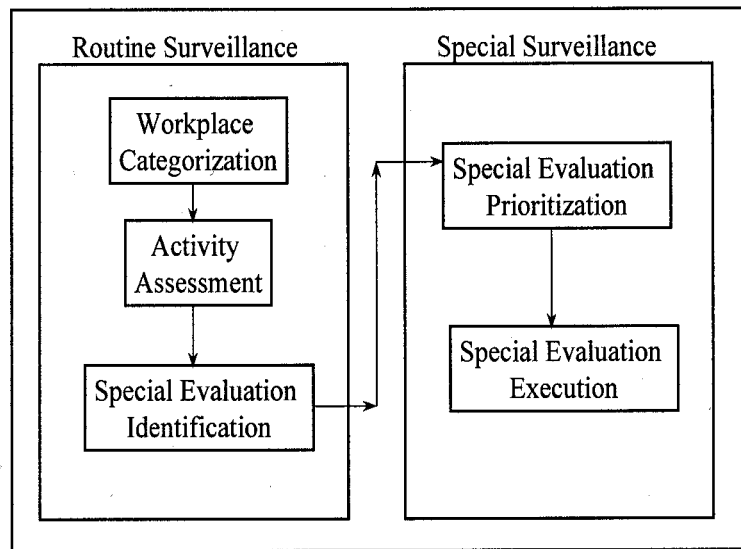
2.1. Purpose. The purpose of the activity surveillance process is to enhance overall mission effectiveness by protecting human resources in the workplace, reducing costs, and improving performance. Additionally, this process provides a framework to:

- 2.1.1. Shift surveillance efforts to those activities posing the highest risk.
- 2.1.2. Anticipate, recognize, evaluate and recommend controls to minimize the risk posed by Air Force activities on health and the environment.
- 2.1.3. Eliminate exposures by prescribing process/product substitution or installation of engineering controls.
- 2.1.4. Promote compliance with federal, state or host-nation, and local occupational safety and health, nuclear regulatory, and environmental protection standards and requirements using a risk based approach.
- 2.1.5. Advance from simple quantification of exposures and use of expedient controls that result in long-term monitoring, occupational physical exams, or extensive use of personal protective equipment to application of risk based engineering principles to solve problems and effect lasting solutions.

2.2. Program Description. The Activity Surveillance Process, illustrated in [figure 2.1.](#), is organized into two basic processes: Routine Surveillance and Special Surveillance.

2.2.1. Routine surveillance is the process where BE periodically assesses activities and identifies: potential worker health risks; data required to characterize the health risks; additional evaluations needed to obtain those required data; occupational health program costs; processes in which more current technology may be applicable; and compliance with occupational health program and regulatory requirements.

2.2.2. Special surveillance is the process where BE further characterizes the health risk to the workers through specific monitoring such as sound level measurements, air sampling, ventilation surveys, thermal stress surveys, etc. The results of the additional monitoring are interpreted by comparison with health standards. The documented health risk assessment is then conveyed to the workplace for their information and action.

Figure 2.1. Activity Surveillance Strategy.**Section 2B—Routine Surveillance Process****2.3. Workplace Categorization.**

2.3.1. Develop master listing of all workplaces included in the Bioenvironmental Engineering area of responsibility. This list includes all workplaces (industrial and administrative), contract operations requiring support, and host tenant support sites.

2.3.2. Categorize each workplace as to its risk based on federal, state, and host nation requirements, local priorities, and the guid outlined in [table 2.1.](#), Workplace Categorization and Surveillance Frequency.

2.4. Activity Assessments. Consist of workplace visits performed to: identify potential health risks posed by workplace activities, determine the level of additional monitoring required to characterize those risks, validate the adequacy of controls, and determine compliance with health related programs, standards and laws. The workplace assessment provides a “triage” function for follow-on execution of well defined special evaluations of activities.

2.4.1. Develop a master surveillance schedule based on the workplace categorization, available resources and surveillance frequency requirements in [table 2.1.](#)

2.4.2. Perform activity assessments according to the master schedule using 29 CFR 1960 Subpart D, Inspection and Abatement, as a guide for performing the assessment.

2.4.3. Provide commanders and workers with a written report summarizing the outcome of the routine surveillance, plans for special evaluations and recommended actions to reduce risk.

2.4.4. Periodically assess adherence to the routine surveillance plan and adjust as needed.

2.5. Special Evaluation Identification. During routine surveillance, it may become apparent that additional BE investment is needed to better characterize risks posed by activities, improve hazard controls, or improve compliance with specific regulatory requirements. Special surveillance evaluations are identified to fill these needs.

Section 2C—Special Surveillance Process

2.6. Special Surveillance. The special surveillance process entails the planning and execution of special evaluations to provide information required to improve understanding and characterization of the hazards and the effectiveness of hazard controls. Special evaluation requirements generally are identified by routine workplace assessments but may also be identified by other sources such as illness or injury reports. The Special Surveillance process is described below:

- 2.6.1. Prioritize Special Evaluations using guidance provided in [table 2.2](#).
- 2.6.2. Periodically review the list of special surveillance requirements and adjust schedules as required.
- 2.6.3. Perform special surveillance projects in priority order (see [table 2.2](#)).
- 2.6.4. Provide commanders and workers with a written report summarizing the outcome of the special evaluation, plans for additional evaluations and recommended actions to reduce risk and cost.

Table 2.1. Workplace Categorization & Surveillance Frequency.

NOTE: This table is a tool for categorizing workplaces based on potential health risk to workers. The categorization decision rests with the Bioenvironmental Engineering Flight Commander (or equivalent). The categorization process should include consultation with affected squadron commander and the OHWG. Suggest the characteristics listed here, coupled with local priorities, be integrated into an Operational Risk Management risk matrix to aid in decision making. Please note that the characteristics listed here are not “all inclusive” and are meant as guidelines. These characteristics should not be used in “checklist” fashion.		
Workplace Category	Characteristics	Minimm Assessment Frequency (Months)
1 High	Sources of inherent health risk and medium to high hazard potential	12
	Change in workforce (e.g. Military to civilian, turnover)	
	OSHA or other regulatory surveillance requirements	
	Contract requirements (e.g. Contract calls for annual surveillance)	
	Potential environmental impact upon human health	
	Significant Occupational Health Occurrence(s)	
	Significant non-compliance	
2 Medium	Require special purpose occupational exams (other than audiograms) or require the use of personal protective equipment to control exposures to hazardous chemicals	24
	Industrial environment with some inherent sources of health risk present and relatively low hazard potential	
	Hazards well defined and controlled	
	Work environment and processes stable	
	Little potential for hazards to go out of control or create significant harm	
	Annual surveillance through Safety	
	Potential for environmental impact through non-compliance with a standard	
	Administrative work areas with significant ergonomic or IAQ impact	
3 Low	Require annual audiograms only	As needed
	Administrative work with minimal ergonomic or IAQ impact	
	No or negligible sources of health risk present	
	Annual surveillance through Safety	
	Full health compliance	

Table 2.2. Special Surveillance Assessment Categorization.

Confidence In Hazard Characterization	Confidence In Existing Controls		
	LOW	MEDIUM	HIGH
LOW	A	A	B
MEDIUM	A	B	C
HIGH	B	C	D

NOTES: Integrate factors such as command interest, relative toxicity, risk of hazard, political pressures, seasonal conditions, logical grouping of work, worker interest and awareness etc., into the final categorization of the special surveillance needs resulting in categorization in one of the following categories: **Priority A** indicates a high priority. **Priority B** indicates a medium priority. **Priority C** indicates a low priority. **Priority D** indicates that a special evaluation is not needed, unless other factors come into play such as regulatory requirements or special outside interest.

Confidence in Hazard Characterization -- a qualitative assessment of the question: "Do I know enough about the exposure to reach sound conclusions?" In determining your confidence, a number of factors should be considered. These factors include (but are not limited to): sampling and analytical error, variability in sampling results, similarity to results from similar operations, and representation of the activity analyzed.

Confidence in Controls -- a qualitative, and maybe quantitative, assessment, on how well and how consistently the hazard is controlled. In some ways, this measures the probability of the control preventing exposures.

Chapter 3 CLINICAL SURVEILLANCE PROCESS

3.1. Purpose. The purpose of clinical surveillance is to determine if Air Force Operations are adversely affecting the health of workers, meet specific regulatory requirements for medical monitoring, and assess the adequacy of protective measures.

3.2. Types of Occupational Health Examinations (OHEs).

3.3. Baseline (or Preplacement).

3.3.1. OHE. These examinations are performed before placement in a specific job to assess (from a medical standpoint) if the worker will be able to perform the job capably and safely, to determine if the worker meets any established physical standards, and to obtain baseline measurements for future comparison. Ideally, these medical examinations should be done before commencement of work. However, if the individual already has started work, these examinations will be completed within 60 days of assignment unless more stringent requirements exist (example: DoD Instruction 6055.5, *Industrial Hygiene and Occupational Health*).

3.3.1.1. This exam should be accomplished prior to exposure for all workers permanently or temporarily assigned to the work area for 30 or more days per year unless more stringent requirements exist. For example, respirator wearers must receive a baseline examination regardless of anticipated duration of work.

3.3.1.2. To accommodate supervisor needs and mission requirements for transitory assignments to other processes, multiple baseline exams may be accomplished at the same time.

3.3.1.3. Any conditions that may predispose workers to OHO must be documented in the medical record. Only after the employer has addressed reasonable accommodation, will those conditions constituting a direct threat to the worker's personal safety or the safety of others be considered disqualifying factors.

3.3.2. Periodic OHE. Periodic OHEs are accomplished to identify early changes in health status and may include medical monitoring to detect evidence of exposure including subtle biologic changes indicative of OHOs.

3.3.3. Termination of Exposure OHE. An evaluation accomplished upon termination of exposure such as PCS or transfer to another workplace. Normally, this OHE will be the same as the periodic evaluation. Generally, if a periodic OHE was accomplished within the last 90 working days, a termination of exposure OHE will not be required.

3.4. Termination of Employment.

3.4.1. OHE. These evaluations are accomplished to characterize worker health at termination of employment (separation, retirement, transfer, job change).

3.5. Defining Occupational Health Examination (OHE) Requirements Process. OHE requirements are defined by the OHWG.

- 3.5.1. Examination content and frequency are based on an understanding of the job demands, exposures to the workers, the medical effects of specific exposures, the impact of specific medical conditions on job performance and safety, and legal and regulatory requirements.
- 3.5.2. Protocols may include employee health promotion and personnel programs.
- 3.5.3. HWG must be aware of collective bargaining agreements and support agreements that entitle specific employee groups to health benefit programs or other medical benefits.
- 3.5.4. If examinations are deemed inappropriate or of little value, document the decision rationale.
- 3.5.5. Determine regulatory requirements for examinations.

3.6. OHE Scheduling, Reporting and Follow-up Process. The OHE scheduling, reporting and follow-up process is performed by the Physical Exams and Standards Element or the Occupational Medicine Section.

- 3.6.1. Work with supervisors or designated unit representatives or employees to schedule appointments. Wherever possible, combine scheduled employee appointments with other appointments such as Preventive Health Assessments (PHA).
- 3.6.2. Validate personnel assignments.
- 3.6.3. Track completion and no show/cancellation rates for clinical surveillance. Coordinate with supervisors to maximize completion rates and to minimize impact on mission where possible.
- 3.6.4. Maintain records of completion and no show/cancellation rates. Maintenance of these statistics may be combined with other similar measurements such as completion rates for PHA or respirator fit testing completion rates.
- 3.6.5. Document all OHE results in the worker's medical record.
- 3.6.6. Communicate results of the OHE to the worker (within time limits specified by OSHA and AFOSH Standards) and OHWG.
- 3.6.7. Schedule any required follow-ups and monitor until completion.

CHARLES H. ROADMAN, II, Lt General, USAF, MC
Surgeon General

Attachment 1

GLOSSARY OF REFERENCES AND SUPPORTING INFORMATION

References

29 CFR 1960, Basic Program Elements for Federal Employees OSHA.

DODI 6055.1, *DoD Occupational Safety and Health Program*

DOD 6055.5-M, *Occupational Medical Surveillance Manual*

AFPD 48-1, *Aerospace Medical Programs*

AFPD 90-8, *Environment, Safety, and Occupational Health*

AFPD 91-3, *Occupational Safety and Health*

AFI 44-102, *Community Health Management*

AFI 48-105, Surveillance, Prevention, and Control of Diseases and Conditions of Public Health or Military Significance

AFI 48-109, *Epidemiological Services*

AFI 48-123, *Medical Examination and Standards*

AFI 91-202, *The US Air Force Mishap Prevention Program*

AFI 91-213, *Operational Risk Management (ORM) Program*

AFPAM 91-215, *Operational Risk Management (ORM) Guidelines and Tools*

AFI 91-301, *Air Force Occupational and Environmental Safety, Fire Protection, and Health (AFOSH) Program*

NIOSH Publication 79-116, *A Guide to the Work Relatedness of Disease*,

U.S Department of Health, Education, and Welfare

Public Health Service

Center for Disease Control

National Institute for Occupational Safety and Health

Abbreviations and Acronyms

AFMOA—Air Force Medical Operations Agency

AFOSH—Air Force Occupational and Environmental Safety, Fire Protection and Health

BE—Bioenvironmental Engineering

BEE—Bioenvironmental Engineer

FECA—Federal Employee Compensation Act

HP—Health Promotion

IERA—Institute for Environment, Safety, and Occupational Health Risk Analysis

MSP—Mission Support Plan

NIOSH—National Institute for Occupational Safety and Health

OHE—Occupational Health Examination

OHO—Occupational Health Occurrence

OHWG—Occupational Health Working Group

ORM—Operational Risk Management

OSHA—Occupational Safety and Health Act

PH—Public Health

PHA—Preventive Health Assessment

PPBS—Planning, Programming, and Budgeting System

Terms

Activity—Any item of work or situation, that poses a risk, and may require evaluation and control.

Air Force Civilian—Senior executive service (SES), general manager (GM), general schedule (GS), and federal wage system (FWS) employees, including ANG and USAFR technicians; scientific and technical; administratively determined; US citizen employees in Panama; nonappropriated fund employees; Youth and Student Assistance Program employees; and foreign nationals employed by the Air Force under a direct or indirect hire arrangement. **NOTE:** Excludes Army-Air Force Exchange Service (AAFES), Defense Commissary Agency (DECA), and Defense Finance and Accounting Service (DFAS) employees.

Air Force Military—All military personnel on active duty with the US Air Force; ANG and USAFR personnel on active duty or in drill status; US Air Force Academy cadets; Reserve Officers' Training Corps cadets when engaged in directed training activities; and foreign national military personnel assigned to the US Air Force.

Air Force Worker—All Air Force military and civilian personnel performing duty on or off Air Force installations.

Clinical Surveillance—The process by which workers receive occupational health examinations (OHE) and the results of these examinations are analyzed to determine if Air Force operations are adversely affecting the health of the workers. Clinical surveillance is also required in specific instances to meet Occupational Safety and Health Act (OSHA) requirements for medical monitoring. Additionally, clinical surveillance can be used to assess the adequacy of protective measures.

Clinical Surveillance—The process by which workers receive occupational health examinations (OHE) which are designed and conducted based on an assessment of workers' identified occupational health risks. It includes medical encounters where AF workers seek medical care for job-related illness and injury. The results of these examinations are analyzed to determine if Air Force operations are adversely affecting the health of the workers. Clinical surveillance is also required in specific instances to meet OSHA requirements for medical monitoring. Additionally, clinical surveillance can be used to assess the adequacy of protective measures.

Confidence in Controls—a qualitative, and maybe quantitative, assessment, on how well and how

consistently the hazard is controlled. In some ways, this measures the probability of the control preventing exposures.

Confidence in Hazard Characterization—a qualitative assessment of the question: “Do I know enough about the exposure to reach sound conclusions?” In determining your confidence, a number of factors should be considered. These factors include (but are not limited to): sampling and analytical error, variability in sampling results, similarity to results from similar operations, and representation of the activity analyzed.

Occupational Health Occurrence (OHO)—A suspected or confirmed adverse health event caused or aggravated by Federal employment as described in Occupational Injury and Illness Reporting Guidelines for Federal Agencies (OMB 1200-0029). OHOs also include subtle biological changes indicative of exposure.

Routine surveillance—The process where BE periodically assesses activities and identify: potential worker health risks; data required to characterize the health risks; additional evaluations needed to obtain those required data; occupational health program costs; processes in which more current technology may be applicable; and compliance with occupational health program and regulatory requirements.

Special surveillance—The process where Bioenvironmental Engineering (BE) further characterizes the health risk to the workers through specific monitoring such as sound level measurements, air sampling, ventilation surveys, thermal stress surveys, etc. The results of the additional monitoring are interpreted by comparison with health standards. The documented health risk assessment is then conveyed to the workplace for their information and action.